RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/155,327E

DATE: 06/25/2002
TIME: 10:23:54

#38

Input Set : N:\paola\US09155327E.RAW
Output Set: N:\CRF3\06252002\I155327E.raw

```
      1 <110> APPLICANT: AMRAD Operations Pty Ltd
      2 <120> TITLE OF INVENTION: A NOVEL MAMMALIAN GENE, bcl-2, BELONGS TO THE bcl-2
      3       FAMILY OF APOPTOSIS-CONTROLLING GENES
      4 <130> FILE REFERENCE: 2096584
C-->  5 <140> CURRENT APPLICATION NUMBER: US/09/155,327E
      6 <141> CURRENT FILING DATE: 1999-03-29
      7 <150> PRIOR APPLICATION NUMBER: PN8965
      8 <151> PRIOR FILING DATE: 1996-03-27
      9 <160> NUMBER OF SEQ ID NOS: 9
     10 <170> SOFTWARE: PatentIn Ver. 2.1
     12 <210> SEQ ID NO: 1
     13 <211> LENGTH: 33
     14 <212> TYPE: DNA
     15 <213> ORGANISM: Mouse
     16 <220> FEATURE:
     17 <221> NAME/KEY: modified_base
     18 <222> LOCATION: 16
     19 <223> OTHER INFORMATION: n is inosine
     20 <220> FEATURE:
     21 <221> NAME/KEY: modified_base
     22 <222> LOCATION: 19
     23 <223> OTHER INFORMATION: n is inosine
     24 <220> FEATURE:
     25 <221> NAME/KEY: modified_base
     26 <222> LOCATION: 22
     27 <223> OTHER INFORMATION: n is inosine
     28 <220> FEATURE:
     29 <221> NAME/KEY: modified_base
     30 <222> LOCATION: 25
     31 <223> OTHER INFORMATION: n is inosine
     32 <400> SEQUENCE: 1
W--> 33       gctctagaac tggggnhgnr tngtngcctt ytt                    33
     35 <210> SEQ ID NO: 2
     36 <211> LENGTH: 9
     37 <212> TYPE: PRT
     38 <213> ORGANISM: Mouse
     39 <220> FEATURE:
     40 <221> NAME/KEY: Unsure
     41 <222> LOCATION: 5
     42 <223> OTHER INFORMATION: Xaa is Ile or Val
     43 <400> SEQUENCE: 2
W--> 44       Asn Trp Gly Arg Xaa Val Ala Phe Phe
     45         1               5
```

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    47 <210> SEQ ID NO: 3
    48 <211> LENGTH: 31
    49 <212> TYPE: DNA
    50 <213> ORGANISM: Mouse
    51 <220> FEATURE:
    52 <221> NAME/KEY: modified_base
    53 <222> LOCATION: 14
    54 <223> OTHER INFORMATION: n is inosine
    55 <220> FEATURE:
    56 <221> NAME/KEY: modified_base
    57 <222> LOCATION: 17
    58 <223> OTHER INFORMATION: n is inosine
    59 <220> FEATURE:
    60 <221> NAME/KEY: modified_base
    61 <222> LOCATION: 20
    62 <223> OTHER INFORMATION: n is inosine
    63 <400> SEQUENCE: 3                                                  31
W--> 64       ggaattccca gccnccntkn tcttggatcc a
    66 <210> SEQ ID NO: 4
    67 <211> LENGTH: 8
    68 <212> TYPE: PRT
    69 <213> ORGANISM: Mouse
    70 <220> FEATURE:
    71 <221> NAME/KEY: Unsure
    72 <222> LOCATION: 4
    73 <223> OTHER INFORMATION: Xaa is Asp or Glu
    74 <220> FEATURE:
    75 <221> NAME/KEY: Unsure
    76 <222> LOCATION: 5
    77 <223> OTHER INFORMATION: Xaa is Asn or Gln
    78 <400> SEQUENCE: 4
W--> 79       Trp Ile Gln Xaa Xaa Gly Gly Trp
    80          1               5
    82 <210> SEQ ID NO: 5
    83 <211> LENGTH: 14
    84 <212> TYPE: PRT
    85 <213> ORGANISM: Mouse
    86 <400> SEQUENCE: 5
    87       Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val
    88          1               5                   10
    90 <210> SEQ ID NO: 6
    91 <211> LENGTH: 583
    92 <212> TYPE: DNA
    93 <213> ORGANISM: HUMAN
    94 <220> FEATURE:
    95 <221> NAME/KEY: CDS
    96 <222> LOCATION: (1)..(579)
    97 <400> SEQUENCE: 6
    98       atg gcg acc cca gcc tcg gcc cca gac aca cgg gct ctg gtg gca gac   48
```

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```
99        Met Ala Thr Pro Ala Ser Ala Pro Asp Thr Arg Ala Leu Val Ala Asp
100         1               5                  10                  15
101       ttt gta ggt tat aag ctg agg cag aag ggt tat gtc tgt gga gct ggc   96
102       Phe Val Gly Tyr Lys Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
103                   20                  25                  30
104       ccc ggg gag ggc cca gca gct gac ccg ctg cac caa gcc atg cgg gca   144
105       Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
106                35                  40                  45
107       gct gga gat gag ttc gag acc cgc ttc cgg cgc acc ttc tct gat ctg   192
108       Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
109            50                  55                  60
110       gcg gct cag ctg cat gtg acc cca ggc tca gcc cag caa cgc ttc acc   240
111       Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
112        65                  70                  75                  80
113       cag gtc tcc gac gaa ctt ttt caa ggg ggc ccc aac tgg ggc cgc ctt   288
114       Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
115                      85                  90                  95
116       gta gcc ttc ttt gtc ttt ggg gct gca ctg tgt gct gag agt gtc aac   336
117       Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
118                  100                 105                 110
119       aag gag atg gaa cca ctg gtg gga caa gtg cag gag tgg atg gtg gcc   384
120       Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Glu Trp Met Val Ala
121               115                 120                 125
122       tac ctg gag acg cgg ctg gct gac tgg atc cac agc agt ggg ggc tgg   432
123       Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
124           130                 135                 140
125       gcg gag ttc aca gct cta tac ggg gac ggg gcc ctg gag gag gcg cgg   480
126       Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
127       145                 150                 155                 160
128       cgt ctg cgg gag ggg aac tgg gca tca gtg agg aca gtg ctg acg ggg   528
129       Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
130                      165                 170                 175
131       gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc   576
132       Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
133                  180                 185                 190
134       aag tgaa                                                        583
135       Lys
137 <210> SEQ ID NO: 7
138 <211> LENGTH: 193
139 <212> TYPE: PRT
140 <213> ORGANISM: HUMAN
141 <400> SEQUENCE: 7
142       Met Ala Thr Pro Ala Ser Ala Pro Asp Thr Arg Ala Leu Val Ala Asp
143         1               5                  10                  15
144       Phe Val Gly Tyr Lys Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
145                   20                  25                  30
146       Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
147                35                  40                  45
148       Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
```

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Input Set : N:\paola\US09155327E.RAW
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```
149          50                  55                  60
150      Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
151       65                  70                  75                  80
152      Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
153                      85                  90                  95
154      Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
155                 100                 105                 110
156      Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Glu Trp Met Val Ala
157             115                 120                 125
158      Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
159          130                 135                 140
160      Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
161      145                 150                 155                 160
162      Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
163                      165                 170                 175
164      Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
165                 180                 185                 190
166      Lys
168 <210> SEQ ID NO: 8
169 <211> LENGTH: 582
170 <212> TYPE: DNA
171 <213> ORGANISM: Mouse
172 <220> FEATURE:
173 <221> NAME/KEY: CDS
174 <222> LOCATION: (1)..(579)
175 <400> SEQUENCE: 8
176      atg gcg acc cca gcc tca acc cca gac aca cgg gct cta gtg gct gac   48
177      Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val Ala Asp
178        1               5                  10                  15
179      ttt gta ggc tat agg ctg agg cag aag ggt tat gtc tgt gga gct ggc   96
180      Phe Val Gly Tyr Arg Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
181                   20                  25                  30
182      cct ggg gaa ggc cca gcc gcc gac ccg ctg cac caa gcc atg cgg gct   144
183      Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
184              35                  40                  45
185      gct gga gac gag ttt gag acc cgt ttc cgc cgc acc ttc tct gac ctg   192
186      Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
187           50                  55                  60
188      gcc gct cag cta cac gtg acc cca ggc tca gcc cag caa cgc ttc acc   240
189      Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
190       65                  70                  75                  80
191      cag gtt tcc gac gaa ctt ttc caa ggg ggc cct aac tgg ggc cgt ctt   288
192      Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
193                      85                  90                  95
194      gtg gca ttc ttt gtc ttt ggg gct gcc ctg tgt gct gag agt gtc aac   336
195      Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
196                 100                 105                 110
197      aaa gaa atg gag cct ttg gtg gga caa gtg cag gat tgg atg gtg gcc   384
198      Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Asp Trp Met Val Ala
```

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Input Set : N:\paola\US09155327E.RAW
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```
                115                 120                 125
tac ctg gag aca cgt ctg gct gac tgg atc cac agc agt ggc ggc tgg   432
Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
    130                 135                 140
gcg gag ttc aca gct cta tac ggg gac ggg gcc ctg gag gag gca cgg   480
Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
145                 150                 155                 160
cgt ctg cgg gag ggg aac tgg gca tca gtg agg aca gtg ctg acg ggg   528
Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
                165                 170                 175
gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc   576
Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
            180                 185                 190
aag tga                                                          582
Lys
```

<210> SEQ ID NO: 9
<211> LENGTH: 193
<212> TYPE: PRT
<213> ORGANISM: Mouse
<400> SEQUENCE: 9

```
Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val Ala Asp
 1               5                  10                  15
Phe Val Gly Tyr Arg Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
            20                  25                  30
Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
        35                  40                  45
Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
    50                  55                  60
Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
65                  70                  75                  80
Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
                85                  90                  95
Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
            100                 105                 110
Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Asp Trp Met Val Ala
        115                 120                 125
Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
    130                 135                 140
Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
145                 150                 155                 160
Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
                165                 170                 175
Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
            180                 185                 190
Lys
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 06/25/2002
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Input Set : N:\paola\US09155327E.RAW
Output Set: N:\CRF3\06252002\I155327E.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 16,19,22,25
Seq#:2; Xaa Pos. 5
Seq#:3; N Pos. 14,17,20
Seq#:4; Xaa Pos. 4,5

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/155,327E

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Input Set : N:\paola\US09155327E.RAW
Output Set: N:\CRF3\06252002\I155327E.raw

L:5 M:270 C: Current Application Number differs, Wrong Format
L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:44 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:64 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0